

This listing of claims will replace all prior versions and listings of claims in the application.
Please cancel claims 1-62. Please amend claims 63-66.

Listing of Claims:

1-62. (Canceled)

63. (Currently Amended) A β -lactamase enzyme fragment for use in a fragment
complementation system comprising an N-terminal β -lactamase fragment,
wherein said N-terminal β -lactamase fragment consists of amino acids ~~±~~ 26 to 188
up to amino acid 207 of a β -lactamase sequence with the following numbering convention:

His Pro Glu Thr Leu Val Lys Val Lys Asp Ala Glu Asp Gln Leu Gly

26 30 35 40

Ala Arg Val Gly Tyr Ile Glu Leu Asp Leu Asn Ser Gly Lys Ile Leu

 45 50 55

Glu Ser Phe Arg Pro Glu Glu Arg Phe Pro Met Met Ser Thr Phe Lys

 60 65 70

Val Leu Leu Cys Gly Ala Val Leu Ser Arg Ile Asp Ala Gly Gln Glu

 75 80 85

Gln Leu Gly Arg Arg Ile His Tyr Ser Gln Asn Asp Leu Val Glu Tyr

90 95 100 105

Ser Pro Val Thr Glu Lys His Leu Thr Asp Gly Met Thr Val Arg Glu

 110 115 120

Leu Cys Ser Ala Ala Ile Thr Met Ser Asp Asn Thr Ala Ala Asn Leu

 125 130 135

Leu Leu Thr Thr Ile Gly Gly Pro Lys Glu Leu Thr Ala Phe Leu His

 140 145 150

Asn Met Gly Asp His Val Thr Arg Leu Asp Arg Trp Glu Pro Glu Leu

 155 160 165

Asn Glu Ala Ile Pro Asn Asp Glu Arg Asp Thr Thr Met Pro Val Ala
170 175 180 185
Met Ala Thr Thr Leu Arg Lys Leu Leu Thr Gly Glu Leu Leu Thr Leu
190 195 200
Ala Ser Arg Gln Gln Leu Ile Asp Trp Met Glu Ala Asp Lys Val Ala
205 210 215
Gly Pro Leu Leu Arg Ser Ala Leu Pro Ala Gly Trp Phe Ile Ala Asp
220 225 230
Lys Ser Gly Ala Gly Glu Arg Gly Ser Arg Gly Ile Ile Ala Ala Leu
235 240 245
Gly Pro Asp Gly Lys Pro Ser Arg Ile Val Val Ile Tyr Thr Thr Gly
250 255 260 265
Ser Gln Ala Thr Met Asp Glu Arg Asn Arg Gln Ile Ala Glu Ile Gly
270 275 280
Ala Ser Leu Ile Lys His Trp
285

~~of~~(SEQ ID NO: 2);

wherein said N-terminal β -lactamase fragment is able to functionally reconstitute with a C-terminal β -lactamase enzyme fragment consisting of amino acids ~~263~~ 288 to 208 up to amino acid 189 of ~~SEQ ID NO: 2~~ said β -lactamase sequence; and

wherein said N-terminal β -lactamase fragment is altered from ~~SEQ ID NO: 2~~ said β -lactamase sequence by at least one amino acid substitution selected from the group consisting of:

- (a) a lysine to glutamic acid substitution at position 55,
- (b) a proline to serine substitution at position 62, and
- (c) a methionine to threonine substitution at position 182.

1 64. (Currently Amended) The β -lactamase enzyme fragment of claim 63, wherein
2 said N-terminal β -lactamase fragment consists of amino acids ~~4~~ 26 to 195 up to amino acid 202
3 of ~~SEQ ID NO: 2~~ said β -lactamase sequence.

1 65. (Currently Amended) The β -lactamase enzyme fragment of claim 63, wherein
2 said N-terminal β -lactamase fragment consists of amino acids ~~4~~ 26 to 197 of ~~SEQ ID NO: 2~~ said
3 β -lactamase sequence and said C-terminal β -lactamase fragment consists of amino acids ~~263~~ 288
4 to 198 of ~~SEQ ID NO: 2~~ said β -lactamase sequence.

1 66. (Currently Amended) The β -lactamase enzyme fragment of claim 63, wherein
2 said N-terminal β -lactamase fragment consists of amino acids ~~4~~ 26 to 197 of ~~SEQ ID NO: 2~~ said
3 β -lactamase sequence, said C-terminal β -lactamase fragment consists of amino acids ~~263~~ 288 to
4 198 of ~~SEQ ID NO: 2~~ said β -lactamase sequence, and said N-terminal β -lactamase fragment
5 comprises the amino acid substitution (c).